

Notice of Allowability

Application No.

10/561,218

Examiner

Michael Bernshteyn

Applicant(s)

HOSODA ET AL.

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/31/2006.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 07/20/2006
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This Office Action is a response to the remarks filed August 31, 2006. Claims 1, 2, 7 and 8 have been amended.
2. Applicant's arguments, see remarks, filed August 31, 2006 with respect to claims 1-13 have been fully considered and are persuasive. The rejection of claims 1-13 has been withdrawn.
3. Claims 1-13 are now pending.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Leana Levin on November 6, 2006.

5. Claim 1, after the words "monomer (A)" in line 5, delete the lines 6 and 7 and write the following on line 6: --n-butyl acrylate monomer or an alkyl (meth)acrylate monomer (B) having the alkyl group selected from the group consisting of lauryl and stearyl;-- .

Claim 7, after the words "monomer (A)" in line 4, delete the lines 5 and 6 and write the following in line 5: --n-butyl acrylate monomer or an alkyl (meth)acrylate

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monomer (B) having the alkyl group selected from the group consisting of lauryl and stearyl;-- .

Allowable Subject Matter

6. Claims 1-13 are allowed.

7. The following is examiner's statement of reasons for allowance:

The present claims are allowable over the closest reference: Tanaka et al. (JP 10-309455).

Tanaka discloses a fluorine based **surface-active** agent, which is prepared from a copolymer containing an ethylene unsaturated monomer (A) having a fluoroalkyl group and an ethylene unsaturated monomer (B) having a branching aliphatic hydrocarbon group. This fluorine based surface-active agent is used in variety of **coating compositions** having an excellent leveling property, which are obtained from a copolymer comprising the above monomers (abstract).

With regard to the limitations of claims 1, 2, 6-8 and 12, Tanaka discloses an ethylene unsaturated monomer (A) having a **fluoroalkyl group**, which is preferably **fluoroacrylate or fluoromethacrylate** (page 2, [0014], [0030-0035]). This monomer is responsible for reducing the dynamic **surface tension** used as the index of the leveling nature to the coating approach accompanied by high shearing force. If this component is missing, the engine performance will become inferior and the homogeneity of a coat and smooth nature will be lacked as a result (page 8, [0037]).

This group is readable as monomer (A) in instant claim 1.

Tanaka discloses an ethylene unsaturated monomers (C), which include a polyoxyalkylene group-containing monomers, such as polyethylene glycol acrylate, polyethylene glycol methacrylate, polypropylene glycol acrylate, polypropylene glycol methacrylate, etc. It may use two or more kinds for coincidence (pages 16-17, [0057]-[0061]). This group is readable as monomer (C) in instant claim 1.

Tanaka discloses an ethylene unsaturated monomer (D), which has two or more unsaturated bonds in one molecule. It can be polyethylene glycol, polypropylene glycol, copolymer of polyethylene glycol, polypropylene glycol and ethylene oxide, 1,6-hexamediol diacrylate, etc. (pages 17-18, [0065]).

Tanaka discloses an ethylene unsaturated monomer (E), which is very important in coating compositions for improvement in the further antifoam and advanced leveling nature. Such monomers include **styrene**, acrylonitrile, acrylic acid, methacrylic acid, maleic acid, ethyl, propyl and **butyl acrylates** and methacrylates, **octyl**, dodecyl and **stearyl acrylates** and methacrylates, **2-hydroxyethyl acrylate**, 2-hydroxyethyl methacrylate, 2-hydroxypropyl acrylate, **2-hydroxypropyl methacrylate**, etc. In general, alkyl ester of carbon numbers 1-18 of an acrylic and methacrylic acid can be used. It may use two or more kinds for coincidence (page 18, [0070]-[0073]). This group is readable in instant claim 1 as monomer (B), which includes butyl acrylates and stearyl acrylates, monomer (C), which includes 2-hydroxyethyl acrylate, 2-hydroxyethyl methacrylate, 2-hydroxypropyl acrylate and 2-hydroxypropyl methacrylate, and monomer (D), which includes styrene.

However, Tanaka does not disclose or fairly suggest that the fluorine-containing (meth)acryl type copolymer can be obtained without an ethylene unsaturated monomer having a branching aliphatic hydrocarbon group according the instantly claimed copolymer with the transitional phrase "consisting of", which limits the fluorine-containing (meth)acryl type copolymer to having only the above mentioned four groups monomers: A, B, C and D.

8. As of the date of this Notice of Allowability, the Examiner has not located or identified any reference that can be used singularly or in combination with another reference including Tanaka et al. to render the present invention anticipated or obvious to one of ordinary skill in the art.

9. In the light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delay, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reason for Allowance".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bernshteyn whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8-5:30.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Bernshteyn
Patent Examiner
Art Unit 1713

MB
11/03/2006


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